

CORRECTIONS TO CONDITIONS OF CERTIFICATION FOR THE PICO POWER PROJECT STAFF ASSESSMENT

Below are the changes to various Conditions of Certification that were originally published in Phase 1 of the Staff Assessment for the Pico Power Project (PPP) Application for Certification (AFC), as agreed to by the Applicant and Commission staff. The changes occurred based on: comments from the Applicant; new information gathered since the SA publication date; and errors in data used in the SA. New text is underlined, while deleted text is shown in "strike-through," so that readers can quickly assess the changes in any given section.

HAZARDOUS MATERIALS

Supplemental Testimony of Geoff Lesh and Rick Tyler

1. Staff has agreed to change the due date for information submittals required under Condition **of Certification HAZ-2**. **HAZ-2** is hereby revised to read:

HAZ-2 The project owner shall provide a Risk Management Plan RMP (if required by regulation) to the Certified Unified Program Authority (CUPA) and the CPM for review. A Hazardous Materials Business Plan (HMBP, which shall include the proposed building chemical inventory as per the UFC) shall also be submitted to the CUPA for review and to the CPM for review and approval prior to construction of hazardous materials storage and containment structures. The project owner shall include all recommendations of the CUPA and the CPM in the final HMBP. A copy of the final RMP, including all comments, shall be provided to the CUPA and the CPM.

Verification: At least 30 days prior to prior to the delivery of aqueous ammonia ~~the commencement of construction of hazardous materials storage and containment structures~~, the project owner shall provide the final plans (RMP and HMBP) listed above to the CPM for approval.

LAND USE

Supplemental Testimony of David Flores

1. Because the project design no longer includes the option to move an existing transmission line on the PPP site to an underground route just off-site, **Condition of Certification LAND-9** is no longer needed and is hereby deleted from the SA.

SOIL AND WATER RESOURCES

Supplemental Testimony of Linda Bond and Antonio Mediati

1. At the request of the Applicant, **Condition of Certification SOIL & WATER-1** is hereby revised to read:

SOIL & WATER-1: Prior to beginning any site mobilization activities, the project owner shall obtain staff approval of a Sedimentation and Erosion Control Plan. The plan shall be submitted to the City of Santa Clara Public Works Department for review and comment and to the CPM for approval.

Verification: At least ~~45~~ 60-days prior to the start of any site mobilization activities the Sedimentation and Erosion Control Plan shall be submitted to the CPM for approval and to the City of Santa Clara Public Works Department for review and comment. Comments from other agencies shall be submitted to the CPM. The CPM must approve the sedimentation and Erosion Control Plan prior to the initiation of any site mobilization activities.

1. Similarly, **Condition of Certification SOIL & WATER-2** is hereby revised to read:

SOIL & WATER-2: Prior to beginning site mobilization, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Construction Activity from the Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Construction Activity. The SWPPP will include final construction drainage design consistent with the City of Santa Clara requirements for grading, drainage and erosion control and specify BMPs for all on and off-site PPP project facilities. This includes providing calculations for determining the design capacity of the perimeter drainage, as well as final site drainage plans and locations of BMPs. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD and~~ the City of Santa Clara Public Works Department for review and comment at least ~~45~~ 60 days prior to start of any site mobilization activities.

Verification: At least ~~45~~ 60- days prior to the start of any site mobilization activities, the SWPPP for Construction Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity shall be submitted to the CPM for approval and to the City of Santa Clara Public Works Department for review and comment. Approval of the SWPPP by the CPM must be received prior to initiation of any site mobilization activities.

TRAFFIC AND TRANSPORTATION

Supplemental Testimony of James Adams

1. The applicant has asked for additional time to prepare and submit and parking and staging plan for the project prior to commencing construction, as required in **Condition of Certification TRANS-5**. Staff agrees with the proposed change. Additionally, staff agrees to modify **Conditions of Certification TRANS-5, TRANS-6 and TRANS-7** to remove reference to Santa Clara County, and instead substitute the City of Santa Clara as the appropriate entity to review the required plans. Therefore, **Conditions of Certification TRANS-5, TRANS-6 and TRANS-7** are hereby revised to read:

TRANS-5 During construction of the power plant and all related facilities, the project owner shall enforce a policy that all project-related parking occurs in designated parking areas.

Verification: At least ~~4560~~ days prior to start of site preparation or earth moving activities, the project owner shall submit a parking and staging plan for all phases of project construction to the City of Santa Clara County for review and comment, and to the CPM for review and approval.

TRANS-6 The project owner shall develop a construction traffic control plan that outlines what measures need to be taken on a month-to-month basis with input from the City of Santa Clara, ~~Santa Clara County~~, Caltrans and the CPM. Specifically, the construction Contractor will be required to prepare a traffic control plan and implementation program that addresses timing of heavy equipment and building material deliveries; employee trip reduction; and signing, lighting, and traffic control device placement. The following specific best management practices will be incorporated into the construction traffic control plan:

- Truck loads will not exceed legal limits.
- Loads of material (i.e. excavated soil) will either be enclosed by vehicle covers, wetted, or centered in the truck to prevent wind blowing materials out of the truck.
- Trucks and trailers will be swept clean or hosed after unloading and before entering a public roadway.
- Mufflers, brakes, and all loose items on trucks will be maintained to minimize noise and ensure safe operation.
- Truck operations will be kept to quietest operating speeds. Drivers will be advised to avoid downshifting while driving through or near residential communities.

Verification: At least 30 days prior to start of site preparation or earth moving activities, the project owner shall provide the plan to the City of Santa Clara, ~~Santa~~

~~Clara County~~ and Caltrans for review and comment, and to the CPM for review and approval.

TRANS-7 During construction and operation of the PPP, the project owner and contractors shall enforce a policy that all project-related traffic traveling north on Lafayette Street avoid turning left across traffic onto Duane Street, and from turning left onto Lafayette Street from Duane Street. Staff has identified two alternate routes for reaching the site that avoid the left turn off at Lafayette Street. The first involves using Central Expressway or San Tomas to Scott Boulevard followed by a turn onto Space Park Drive, a left turn onto Kenneth Street, and a right turn onto Duane Street and proceed east to the site. The second route involves going south on De La Cruz to Central Expressway and turning right and proceeding west to Scott Boulevard, followed by a right turn on Space Park Drive and proceeding in the same manner identified in the first route.

Verification: At least 60 days prior to start of site preparation or earth moving activities, the project owner shall provide a traffic routing plan for all phases of project construction and operation to the City of Santa Clara County and Caltrans for review and comment, and to the CPM for review and approval.

TRANSMISSION LINE SAFETY AND NUISANCE

Supplemental Testimony of Obed Odoemelum, Ph.D.

1. Because the undergrounding of an existing PG&E transmission line on the PPP site has already occurred, as part of allowed preconstruction activity, **Condition of Certification TLSN-1** is no longer needed and is hereby deleted from the SA.

VISUAL RESOURCES

Supplemental Testimony of Eric Knight

1. The applicant has asked for additional time to complete and submit a visual screening plan required in **Condition of Certification VIS-5**, and to peg the requirement for the screening plan to the construction of the HRSG, rather than generally to any construction at the plant site. The applicant also sought clarification of which City of Santa Clara agency to which it will submit the screening plan. Staff agrees to these changes. **Condition of Certification VIS-5** is hereby revised to read:

VIS-5 To the extent required by the City of Santa Clara Community Design Guidelines, the project owner shall minimize the visibility of mechanical equipment located on top of the heat recovery steam generator (HRSG) units from public rights-of-way and nearby properties. The color or colors of any screening materials shall minimize visual intrusion and contrast by blending with the landscape and other project structure colors.

The project owner shall develop a plan for screening or otherwise minimizing the visibility of mechanical equipment located on the HRSG units for CPM approval to ensure that the treatment is effective and does not unduly contrast with the surrounding landscape. The project owner shall also submit the plan to the City of Santa Clara Architectural Committee (or other appropriate entity) for review and comment. The submittal to the CPM shall include the City's comments. The plan shall include:

- 1) Specification, and 11" x 17" color photo simulations at life-size scale as seen from a northbound viewpoint on Lafayette Street (between KOPs 1 and 2), Highway 101 (KOP 4), and Raymond Street (KOP 5) of the proposed measure or measures to reduce the visibility of the equipment;
- 2) A detailed schedule for completion of the measures; and,
- 3) A procedure to ensure proper maintenance of the measures for the life of the project.

The project owner shall not implement the plan until approved by the CPM.

Verification: At least ~~4560~~ days prior to start of construction of the HRSG, the project owner shall submit the plan for reducing the visibility of the HRSG equipment to the CPM for review and approval.

If the CPM notifies the project owner of any revisions that are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan.

Not less than 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the screening measures are ready for inspection.

The project owner shall provide a status report regarding maintenance of the screening measures in the Annual Compliance Report.

FACILITY DESIGN

Supplemental Testimony of Shahab Khoshmashrab

The applicant has requested removal of reference to a engineering geologist in **Condition of Certification GEN-5**. Staff agrees with these changes. **Condition of Certification GEN-5** is hereby revised to read:

GEN-5 Prior to the start of rough grading, the project owner shall assign at least one of each of the following California registered engineers to the project: A) a civil engineer; and B) a soils engineer, or a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering; ~~and C) an engineering geologist.~~ Prior to the start of construction, the project owner shall assign at least one of each of the following California registered engineers to the project: CD) a design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; DE) a mechanical engineer; and EF) an electrical engineer. [California Business and Professions Code section 6704 et seq., and sections 6730, 6731 and 6736 requires state registration to practice as a civil engineer or structural engineer in California.] All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the **Transmission System Engineering** section of this document.

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all responsible engineers assigned to the project [1998 CBC, Section 104.2, Powers and Duties of Building Official].

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

A: The civil engineer shall:

1. Review the Foundation Investigations Report, Geotechnical Report or Soils Report prepared by the soils engineer, the geotechnical engineer, or by a civil engineer experienced and knowledgeable in the practice of soils engineering;
2. Design, or be responsible for design, stamp, and sign all plans, calculations and specifications for proposed site work, civil works and

related facilities requiring design review and inspection by the CBO. At a minimum, these include: grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads and sanitary sewer systems; and

3. Provide consultation to the RE during the construction phase of the project and recommend changes in the design of the civil works facilities and changes in the construction procedures.
- B: The soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils engineering, shall:
1. Review all the engineering geology reports;
 2. Prepare the Foundation Investigations Report, Geotechnical Report or Soils Report containing field exploration reports, laboratory tests and engineering analysis detailing the nature and extent of the soils that may be susceptible to liquefaction, rapid settlement or collapse when saturated under load [1998 CBC, Appendix Chapter 33, Section 3309.5, Soils Engineering Report; Section 3309.6, Engineering Geology Report; and Chapter 18, Section 1804, Foundation Investigations];
 3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 1998 CBC, Appendix Chapter 33; Section 3317, Grading Inspections (depending on the site conditions, this may be the responsibility of either the soils engineer or engineering geologist or both); and
 4. Recommend field changes to the civil engineer and RE.

This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations [1998 CBC, section 104.2.4, Stop orders].

~~C: The engineering geologist shall:~~

- ~~1. Review all the engineering geology reports and prepare final soils grading report; and~~
- ~~2. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 1998 CBC, Appendix Chapter 33; Section 3317, Grading Inspections (depending on the site conditions, this may be the responsibility of either the soils engineer or engineering geologist or both).~~

CD: The design engineer shall:

1. Be directly responsible for the design of the proposed structures and equipment supports;

2. Provide consultation to the RE during design and construction of the project;
3. Monitor construction progress to ensure compliance with engineering LORS;
4. Evaluate and recommend necessary changes in design; and
5. Prepare and sign all major building plans, specifications and calculations.

DE: The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the CBO, stating that the proposed final design plans, specifications, and calculations conform with all of the mechanical engineering design requirements set forth in the Energy Commission's Decision.

EE: The electrical engineer shall:

1. Be responsible for the electrical design of the project; and
2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible civil engineer, and soils (geotechnical) engineer ~~and engineering geologist~~ assigned to the project.

At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of construction, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible design engineer, mechanical engineer and electrical engineer assigned to the project.

The project owner shall notify the CPM of the CBO's approvals of the responsible engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.